

What Is Claimed Is:

1. A method for recording data onto a storage medium, comprising the steps of:

- (a) receiving a plurality of primary bit streams of fixed

- length and a plurality of supplemental bit streams of variable length from a codec, said plurality of primary bit streams and said plurality of supplemental bit streams representing data to be recorded onto the storage medium;

- (b) recording each of said plurality of primary bit streams onto the storage medium;

- (c) storing each of said plurality of supplemental bit streams in a temporary memory location; and

- (d) after said plurality of primary bit streams have been recorded onto the storage medium, retrieving said plurality of supplemental bit streams from said temporary memory location and recording said supplemental bit streams onto the storage medium.

2. The method of claim 1 wherein said plurality of primary bit streams are recorded onto the storage medium in real time as they are received from said codec and wherein said plurality of supplemental bit streams are recorded onto the storage medium in a non-real time manner after recording of said plurality of primary bit streams.

3. The method of claim 1 wherein a progressive lossless codec generates said plurality of primary bit streams of fixed length and said plurality of supplemental bit streams of variable length.

4. The method of claim 3 wherein said plurality of primary bit streams and said plurality of supplemental bit streams are generated from image data.

5. The method of claim 3 wherein said plurality of primary bit streams and said plurality of supplemental bit streams are generated from high definition image data.

5 6. The method of claim 1 wherein the storage medium is a high definition tape.

7. The method of claim 1 wherein the storage medium is a hard disk array.

8. A method for providing selectable quality presentation of compressed data stored on a storage medium, comprising the steps of:

- 10 (a) determining a desired data presentation quality level;
- (b) if said desired data presentation quality level is lossy, then
- 15 (i) retrieving a primary portion of the compressed data from the storage medium, and
- (ii) decoding said primary portion of the compressed data;
- 20 (c) if said desired data presentation quality level is lossless, then
- (i) retrieving said primary portion and a supplemental portion of the compressed data from the storage medium, and
- (ii) decoding said primary and supplemental portions of the compressed data; and
- 25 (d) presenting said decoded data.

9. The method of claim 8, wherein said primary portion of the compressed data comprises variable length token vectors or a combination of variable length token vectors and fixed length token vectors.

5 10. The method of claim 9, wherein said supplemental portion of the compressed data comprises fixed length token vectors, a combination of fixed length token vectors and variable length token vectors, or nothing at all.

10 11. The method of claim 10, further comprising the step of: transferring said variable length compressed data to a temporary memory location prior to said step of decoding said primary and supplemental portions of the compressed data.

12. A data storage product comprising a machine readable medium having stored thereon compressed data in a progressive lossless format that facilitates selective data presentation with either lossy quality or lossless quality.

15 13. The data storage product of claim 12 wherein said compressed data comprises header data, variable length data, and fixed length data.

14. The data storage product of claim 12 wherein said machine readable medium is a high definition tape.

15. The data storage product of claim 12 wherein said machine readable medium is a hard disk array.

20 16. A data compression system for recording data onto storage media, comprising:

(a) a codec for generating a plurality of primary bit

streams of fixed length and a plurality of supplemental bit streams of variable length, said plurality of primary and supplemental bit streams representing data to be recorded onto the storage media;

(b) means for receiving said generated plurality of primary bit streams and said plurality of supplemental bit streams;

(c) memory for storing each of said plurality of supplemental bit streams; and

(d) means for recording onto the storage media each of said plurality of primary bit streams and said plurality of supplemental bit streams.

17. The data compression system of claim 16 wherein said codec is a progressive lossless codec.

18. A system for providing selectable quality presentation of compressed data stored on a storage medium, comprising:

(a) means for determining a desired data presentation quality level;

(b) means for retrieving a primary portion of the compressed data and a supplemental portion of the compressed data from the storage medium; and

(c) means for decoding said primary portion and said supplemental portion of the compressed data to facilitate selective data presentation with either lossy quality or lossless quality.

19. The method of claim 18 wherein said means for decoding said primary portion and said supplemental portion of the compressed data to facilitate selective data presentation with either lossy quality or lossless quality is a progressive lossless codec.